

**ABSTRACT**

A system and method for measuring optical characteristics of an optical device under test (DUT) is provided. The system includes a light source for generating an optical signal applied to the optical DUT. A reference interferometer and a test interferometer are optically  
5 coupled to the light source. A computing unit is coupled to the interferometers, and utilizes amplitude and phase computing components, such as orthogonal filters, in determining optical characteristics of the optical DUT.